

Computing for All: How to Truly Prepare 21st Century Learners

HELPFUL LINKS

Lockheed Martin Links

Engineers in the Classroom – <http://www.classroomengineers.org/>

Lockheed Martin Generation Beyond – <https://www.generationbeyondinschool.com/>

Build a Robot – <https://www.lockheedmartin.com/buildarobot>

Funding for the classroom

DonorsChoose.org page – <https://www.donorschoose.org/>

Scratch

Tutorial – <https://scratch.mit.edu/tips> and <https://scratch.mit.edu/studios/4520280/>

The original Scratch publication – <http://web.media.mit.edu/~mres/papers/Scratch-CACM-final.pdf>

Scratch Homepage – <https://scratch.mit.edu/about/>

TED Talk – <https://www.youtube.com/watch?v=Ok6LbV6bqaE>

ScratchED community homepage for educators – <http://scratched.gse.harvard.edu/>

Scratch sample projects across multiple subjects – <http://scratched.gse.harvard.edu/resources/scratch-projects-across-curriculum>

Raspberry Pi

History of the Raspberry Pi – <https://www.youtube.com/watch?v=UCt6d0SCxO4>

Raspberry Pi web site – <http://www.raspberrypi.org>

RasPi Forums – <https://www.raspberrypi.org/forums/> (post questions here)

Education Link on Pi site – <https://www.raspberrypi.org/education/>

Education newsletter – available from the education link above

MagPi magazines – these are a great resource and date back almost to the start of Raspberry Pi. Can find fantastic projects, information and tutorials throughout these.

Electronic version free (including all back issues) – <https://www.raspberrypi.org/magpi/issues/>

Linux

Intro to Linux site – <https://training.linuxfoundation.org/linux-courses/system-administration-training/introduction-to-linux> (Free online self-paced training)

<https://learn.adafruit.com/series/learn-linux-with-raspberry-pi>

<http://www.toptechboy.com/raspberry-pi-with-linux-lessons/>

Arduino

Editors and Simulators – www.arduino.cc; create.arduino.cc;

Learning Resources (and parts) – www.adafruit.com; www.sparkfun.com

3D Printing

17 Incredible 3D Printed Objects – <https://www.youtube.com/watch?v=FSu19nz7NIE>

PC Magazine “The Best 3D Printers of 2018” – <https://www.pcmag.com/article2/0,2817,2470038,00.asp>

Shape Repositories:

Thingiverse – <https://www.thingiverse.com/>

YouMagine – <https://www.youmagine.com/>

Online Printing Services Shapeways – <https://www.shapeways.com/>

Online CAD Freeware Tinkercad – <https://www.tinkercad.com/>

Terminology Guide (One of Many) – <http://pages.makerbot.com/rs/444-ZTM-866/images/MakerBot-3D-Printing-Terminology-Guide.pdf>

File Types (MakerBot) – https://support.makerbot.com/learn/3d-printing/3d-printing-terms/file-types_12662

Using MakerBot Print – https://support.makerbot.com/learn/makerbot-print-software/using-makerbot-print/using-makerbot-print_13586